AZALEA ATLANTICA ASHE AND ITS VARIETY LUTEO-ALBA N. VAR.

By W. C. Coker

Plates 1 and 7

For about eight years I have had under observation a striking species of Azalea, a typical and abundant constituent of low, damp, pine barrens of the coastal plain. My brother, James L. Coker, Jr., first called my attention to the distinction between this species and *A. nudiflora*, which blooms at the same time and with which it is often confused by careless observers. The species is not included in the treatment of the genus in the North American Flora by Dr. Small, but in April, 1917, Mr. W. W. Ashe published in the Bulletin of the Charleston Museum (13 : 26. 1917) a new species, *Azalea atlantica*, the description of which agrees well with our plants except that the color was said to be rose-purple or reddish. As our plant has essentially white flowers throughout its range it seemed improbable that they could be the same. However, on talking with Mr. Ashe he admitted that the flowers were nearly pure white when open, thus removing the principal point of difference. I have also now at hand a specimen in flower from the type locality (Georgetown, S. C.) sent me by Mr. T. G. Harbison on April 26, 1918, and find it the same as Hartsville specimens in all essentials. I now have the plant (from Hartsville) in cultivation in the Arboretum of the University of North Carolina, where it flowered this year.

Azalea atlantica Ashe.

The typical form of the species, as I have observed it, may be described as follows:

Shoots low, slender, strict, hairy or glandular when young, smooth later, sparingly branched, about 15-55 cm. (6-18 in.) high, springing from underground runners and thus forming extensive colonies; leaves up to about 4 cm. long and 1.7 cm. broad, elliptic to obovate, the base pointed at the very short petiole, the tip with a short mucro, margin not recurved or slightly so, ciliate with curved tooth-like hairs, upper surface smooth or sparingly pubescent, the lower nearly smooth or moderately pubescent, grayish-green, the midrib not ciliate (or ciliate, at least when young, in the Georgetown plants). Flowers appearing during the whole of April, 3-4.5 cm. long, glandular and sparingly pubescent or only glandular, not hairy, very fragrant, unfolding before the leaves or in part lagging and simultaneous; corolla tube 2-3 cm. long, expanding

into the open throat, the acute petals with a spread of 3-4 cm., color pure white when open except for a blush of pink or purple on outside near base of tube; the buds more pink. Calyx two-thirds to three-fourths as long as the ovary, varying (in the North Carolina plant) to nearly as long, the strap-shaped lobes blunt, unequal, and upright (recurved or revolute on drying at times), separate to near or below the middle, glandular only or both glandular and with the margin hairy; ovary about 4 mm. long and 3 mm. thick, style about 4-6 cm. long, pale pink to greenish white, hairy (not glandular) over lower half or two-thirds, the knob-like stigma greenish brown; stamens well exserted (about 2 cm.), but not nearly so much so as in *A. nudiflora*, whitish or pale green; pedicels about 7-13 mm. long, pink or greenish. Mature pods about 2 cm. long and 6-7 mm. thick, pointed, somewhat curved, nearly glabrous, dark. Floral glands reddish, very short-stalked, present on pedicels, calyx, ovary and on the outside of the corolla tube and along the central keels of the spreading lobes. Odor strong and very pleasant.

Azalea atlantica var. **luteo-alba** n. var.

Flowers smaller, white when open, the buds and opening flowers with a decided yellowish tint; not pinkish. Otherwise as in the type. Occurring in similar habitats as the type but in separate colonies, and not intermixed. We have found it only at Hartsville, S. C.

A well-marked species that is easily distinguished from *A. nudiflora*, which occurs plentifully in the same territory, though rarely intermixed. It differs in the white, very fragrant, and viscid-glandular (not hairy) flowers with longer tubes, more open throats, much larger calyx, shorter and stouter ovary, and less exserted stamens; by the dwarf size and extensive underground runners; and by the absence of cilia on the midrib. The habitat is also not the same, *A. atlantica* being found in low, damp, undrained pine flats of the coastal plain, while *A. nudiflora* prefers the better-drained soil by ditches, branches or bluffs and extends far beyond the range of the former. *Azalea viscosa*, which is really nearest, is, of course easily distinguished by large size, late flowering (late May to July), and different habitat and habit. It is the only other Azalea of the region occupied by *A. atlantica* and *A. nudiflora*, with the possible exception of the next. *Azalea canescens*, which has the leaves whitish-pubescent below, occurs on better-drained soil, is rose-flowered, is not viscid, and has the same size and habit as *A. nudiflora*, which is very near. Compared with specimens of *A. canescens* at the New York Botanical Garden our plants were easily seen to be different. One plant from Orangeburg, S. C., in the New York Botanical Garden Herbarium, labelled *A.*

AZALEA ATLANTICA